

Labor Market Rigidities and the Employment Behavior of Older Workers

David Blau and Tetyana Shvydko

Department of Economics, University of North Carolina

Chapel Hill, NC 27599-3305

david_blau@unc.edu, tshvydko@email.unc.edu, 919-966-3962

Abstract

The labor market is often asserted to be characterized by rigidities that make it difficult for older workers to carry out their desired trajectories from work to retirement. The rigidities that are cited include lack of opportunity for part-time and flexible-hours work at many firms; low wages and lack of fringe benefits in the part-time employment opportunities that are available; and lack of training and promotion opportunities for older workers both at their career employers and at potential new employers (Hurd, 1996). This paper provides new insights on the labor market for older workers by using rich longitudinal survey data on individuals matched to confidential employment and earnings data on the firms that employ them. The individual data are from the Survey of Program Participation (SIPP) and the employer data are from the Longitudinal Employer-Household Dynamics (LEHD) files (Abowd et al., 2004). Access to the confidential matched worker-firm data is available in the secure research site at the Triangle Census Research Data Center (TCRDC) at Duke University. The paper addresses the following issues:

(1) What accounts for differences in the age structure of employment across firms? Why do some firms employ a larger proportion of older workers than others, and why do some firms hire a larger share of older workers than others? Can these differences across firms be explained by differences in industry, location, and size of firms, or is most of the variation within industry-location-size groups? (2) What is the association between the age composition of employment and hiring on the one hand, and hours worked and the rate of exit of older workers on the other hand? (3) What are the main factors responsible for rigidity in the labor market and its differential effects on older relative to younger workers? The main alternative explanations that can be analyzed with matched employer-employee data are technology-based: fixed costs of hiring, training, and employment; team production considerations; costly monitoring of worker effort; and firm-specific human capital. These explanations can be studied with matched worker-firm data because technology is firm-specific, even within industries.

If preferences for leisure or demand for time in home production (for example, to care for elderly parents) or health problems increase gradually at older ages, then other things equal workers might prefer to gradually reduce hours of work as they age rather than move directly from full time employment to complete retirement. Yet most workers retire by moving directly from full-time employment to non-employment. Onset of a health problem often affects the timing of retirement, but the majority of workers who follow the typical pattern of moving from a career employer directly to retirement appear to be in good health (Blau and Gilleskie, 2001). Two observations suggest that factors other than individual preferences are at least partly responsible for the typical pattern of abrupt exit from the labor force: (1) Self-employed individuals are much more likely to retire gradually than are otherwise similar wage-salary employees (Peracchi and Welch, 1994). (2) When asked directly in surveys, many older workers who are employed

full time state that they could not reduce the number of hours they work at their current employer (Hurd, 1996; Abraham and Houseman, 2004).

Many factors could be responsible for making the labor market rigid. On the demand side of the labor market, if there are fixed costs to firms of hiring, training, and employing a worker, then firms may prefer to hire full-time rather than part-time workers. Hiring and training costs are generally fixed rather than variable, and the cost of some fringe benefits, such as health insurance, is independent of hours worked. If production takes place in teams, then the absence of a team member could reduce team productivity. In this case, firms might require the presence of workers at specific times, reducing the flexibility of workers in scheduling their hours of work. Workers could face statistical discrimination in the labor market as a result of the application of group characteristics to all members of the group (Hellerstein, Neumark, and Troske, 1999). For example, the short expected duration of future employment of a typical older worker reduces the incentive of the firm to train and promote older workers (Hutchens, 1988), despite the fact that some older workers may plan to remain employed for a long time. If human capital is highly firm-specific, it creates a wedge between the worker's wage at the current firm and at other firms. An older worker with long job tenure might have to take a large pay cut in order to change firms.

These possible sources of labor demand rigidity are caused by features of the technology of production, and in some cases would affect all workers, not just older workers. But if the hours-of-work preferences of older workers differ systematically from those of younger workers, then the existence of technology-induced rigidities will be manifested in the age structure of a firm's work force: the more important are rigidities, the lower the share of older workers at a firm. There is evidence that production technology differs substantially across firms, even within narrowly defined industries (Doms et al., 1997). These differences are hypothesized to arise from variation across firms in managerial ability, expectations of future price and technological change, and past investment decisions (Davis and Haltiwanger, 1991). Thus, while technology cannot be measured directly, with firm-level data it may be possible to detect evidence of technology-based rigidities if such rigidities are manifested in differences in the age structure of the work force across firms.

We use a difference-in-difference approach to analysis: compare the behavior of older and younger workers in firms with a larger share of older workers to the behavior of older and younger workers in firms with a smaller share of older workers. Detailed data on workforce composition of firms allows us to experiment with alternative definitions of large and small proportions of older workers employed by firms. Taking the difference between the employment behavior of older and younger workers makes it possible to disentangle the effects of labor market rigidities that affect all workers from those that are specific to older workers. However, if there are factors other than labor market rigidities that cause the age composition of employment to affect the behavior of older workers differently than that of younger workers, this would threaten the validity of the difference-in-difference design. We control for pension and health insurance coverage and the worker's wage rate as well as industry, occupation, and location to partially address this problem. As a specification check, we compare the employment behavior of younger workers to that of still younger workers. For example, older workers might be defined as ages 55-74, younger workers as 45-54, and even younger workers as 35-44. If

rigidities are important, we should see differences in hours of work and exit rates between older and younger workers by age distribution, but not between younger and even-younger workers.

References

Abowd, John M., John Haltiwanger, and Julia Lane (2004). "Integrated Longitudinal Employee-Employer Data for the United States," LEHD Technical Paper 2004-02, May

Abraham, Katherine G. and Susan N. Houseman (2004). "Work and Retirement Plans Among Older Americans," Upjohn Institute for Employment Research Staff Working paper No. 04-105.

Blau, David M. and Donna B. Gilleskie (2001). "The Effect of Health on Employment Transitions of Older Men," in Solomon W. Polacheck (ed.) Worker Wellbeing in a Changing Labor Market, Research in Labor Economics, Volume 20, JAI Elsevier Science, Amsterdam: 35-66.

Davis, Steve J. and John Haltiwanger (1991). "Wage Dispersion between and within U.S. Manufacturing Plants, 1963-1986," *Brookings Papers: Microeconomics*: 115-180.

Doms, Mark, Timothy Dunne, and Kenneth Troske. (1997). "Workers, Wages, and Technology," *Quarterly Journal of Economics* 112: 253-290.

Hellerstein, Judith K., David Neumark, and Kenneth R. Troske (1999). "Wages, Productivity, and Worker Characteristics: Evidence From Plant-Level Production Functions and Wage Equations," *Journal of Labor Economics* 17 (3): 409-446.

Hurd, Michael D. (1996). "The Effect of Labor Market Rigidities on the Labor Force Behavior of Older Workers," in David Wise (ed.) Advances in the Economics of Aging, University of Chicago Press for the NBER, Chicago.

Hutchens, Robert M. (1988). "Do Job Opportunities Decline with Age?" *Industrial and Labor Relations Review* 42 (1): 89-99.

Peracchi, Franco, and Finis Welch (1994). "Labor Force Transitions of Older Workers," *Journal of Labor Economics* 12 (2): 210-242.